

WHAT IS CLAIMED IS:

1. A method of controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots, each slot having a plurality of data bits, and the AT receives the data packet from the AN, the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN with a predetermined first threshold;

10 checking for errors in the data packet in a received time slot if the received power is greater than the first threshold; and

transmitting a signal requesting termination of retransmission of the data packet to the AN if no errors are found in the data packet after said checking.

15 2. The method of claim 1, further comprising the steps of:

determining whether it is a low data rate using a length of a preamble of the received data packet; and

proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same packet

20 two times or more.

3. The method of claim 1, further comprising the steps of:

determining a data rate corresponding to the received power if errors are found in the data packet in the error check; and

25 requesting retransmission of the data packet by transmitting the determined data rate to the AN.

4. The method of claim 1, further comprising the steps of:

determining a data rate corresponding to the received power if the

received power is equal to or less than the first threshold; and

requesting retransmission of the data packet by transmitting the determined data rate to the AN.

- 5 5. The method of claim 1, further comprising the steps of:
 comparing the received power with a predetermined second threshold if
 the received power is equal to or less than the first threshold; and
 transmitting the signal requesting termination of retransmission of the
 data packet to the AN if the received power is less than the second threshold.

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6. The method of claim 5, further comprising the steps of:
 determining the data rate corresponding to the received power if the
 received power is equal to or greater than the second threshold; and
 requesting retransmission of the data packet by transmitting the
 15 determined data rate to the AN.

7. The method of any of claims 1,4 or 5, wherein the first threshold
 is calculated by accumulating a C/I corresponding to the data rate of the current
 data packet as many times as the maximum number of the data packet
 20 transmissions.

8. The method as claimed in either of claims 5 or 6, wherein the second
 threshold is calculated by dividing the required C/I corresponding to a current
 data rate by a predetermined margin and multiplying the number of already
 25 transmitted slots for the current data packet.

9. A method of controlling transmission of a data packet from an
 access network (AN) in an access terminal (AT) of a mobile telecommunication
 system where the AN transmits the data packet in successive time slots each

having a plurality of data bits and the AT receives the data packet from the AN [],
the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN
with a predetermined first threshold; and

- 5 transmitting a signal requesting termination of retransmission of the data
packet to the AN if the received power is greater than the first threshold.

10. The method of claim 9, further comprising the steps of:

- determining whether it is a low data rate using a length of a preamble of
10 the received data packet; and

proceeding further with the comparison step if the determined data rate is
the low data rate, wherein the low data rate repeatedly transmits the same packet
two times or more.

- 15 11. The method of claim 9, further comprising the steps of:

determining a data rate corresponding to the received power if the
received power is equal to or less than the first threshold; and

requesting retransmission of the data packet by transmitting the
determined data rate to the AN.

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12. The method of claim 11, further comprising the steps of:

comparing the received power with a predetermined second threshold if
the received power is equal to or less than the first threshold; and

- transmitting the signal requesting termination of retransmission of the
25 data packet to the AN if the received power is less than the second threshold.

13. The method of claim 12, further comprising the steps of:

determining the data rate corresponding to the received power if the
received power is equal to or greater than the second threshold; and

requesting retransmission of the data packet by transmitting the determined data rate to the AN.

14. The method of any of claims 9 to 13, wherein the first threshold
5 can be calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet transmissions.

15. The method as claimed in either of claims 12 or 13, wherein the
10 second threshold is calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots for the current data packet.

16. A method of controlling transmission of a data packet from an
15 access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet from the AN, the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN
20 with a predetermined threshold; and

transmitting a signal requesting termination of retransmission of the data packet to the AN if the received power is less than the threshold.

17. The method of claim 16, further comprising the steps of:
25 determining whether it is a low data rate using a length of a preamble of the received data packet; and

Proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

18. The method of claim 16, wherein the threshold is calculated by multiplying a received C/I corresponding to a current data rate by the maximum number of data packet transmissions, subtracting a predetermined margin from the product, and multiplying the difference by a ratio of the number of already
5 transmitted slots to the total number of slots transmittable for the data packet.

19. A method of controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each
10 having a plurality of data bits and the AT receives the data packet from the AN, the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN with a predetermined first threshold;

determining a data rate corresponding to the received power if the
15 received power is less than or equal to the first threshold; and

requesting retransmission of the data packet to the AN by transmitting the determined data rate to the AN.

20. The method of claim 19, further comprising the steps of:
20 determining whether it is a low data rate using a length of a preamble of the received data packet; and

proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

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21. The method of claim 19, further comprising the steps of:

comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold;

determining the data rate corresponding to the received power if the

received power is equal to or greater than the second threshold; and

requesting retransmission of the data packet by transmitting the determined data rate to the AN.

- 5 22. The method of any of claims 19 to 21, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet transmissions.

23. The method of claim 21, wherein the second threshold is
10 calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots for the current data packet.

24. A method of controlling transmission of a data packet from an
15 access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet from the AN, the method comprising the steps of:

- comparing a received C/I of a forward pilot signal received from the AN
20 with a predetermined first threshold; and

requesting retransmission of the data packet by transmitting a determined data rate to the AN if the received power is equal to or less than the first threshold.

- 25 25. The method of claim 24, further comprising the steps of:
determining whether it is a low data rate using a length of a preamble of the received data packet; and
proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same data

packet two times or more.

26. The method of claim 24, further comprising the steps of:
 comparing the received power with a predetermined second threshold if
 5 the received power is equal to or less than the first threshold; and
 requesting retransmission of the data packet to the AN if the received
 power is equal to or greater than the second threshold.

27. The method of any of claims 24 to 26, wherein the first threshold
 10 is calculated by accumulating a C/I corresponding to the data rate of the current
 data packet as many times as the maximum number of data packet transmissions.

28. The method of claim 26, wherein the second threshold is
 calculated by dividing the required C/I corresponding to a current data rate by a
 15 predetermined margin and multiplying the number of already transmitted slots
 for the current data packet.

29. An apparatus for controlling transmission of a data packet from
 an access network (AN) in an access terminal (AT) of a mobile
 20 telecommunication system where the AN transmits the data packet in successive
 time slots each having a plurality of data bits and the AT receives the data packet
 from the AN, the apparatus comprising:

a device for comparing a C/I of a forward pilot signal received from the
 AN with a predetermined first threshold;
 25 a device for decoding a data packet in a received time slot and checking
 for errors in the decoded data packet if the received power is greater than the first
 threshold; and
 a device for transmitting a signal requesting termination of
 retransmission of the data packet to the AN if no errors are found in the data

packet.

30. The apparatus of claim 29, wherein the comparator detects the length of the data preamble of the received time slot, determines whether that is the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

31. The apparatus of claim 29, further comprising:
 10 a device for determining a data rate corresponding to the received power if errors are found in the decoded data packet; and
 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

32. The apparatus of claim 31, further comprising:
 15 a device for determining a data rate corresponding to the received power if the received power is equal to or less than the first threshold; and
 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

20 33. The apparatus of claim 31, further comprising:
 a device for comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold; and
 a device for transmitting the signal requesting termination of
 25 retransmission of the data packet to the AN if the received power is less than the second threshold.

34. The apparatus of claim 33, further comprising:
 a device for determining the data rate corresponding to the received

power if the received power is equal to or greater than the second threshold; and
 a device for requesting retransmission of the data packet by transmitting
 the determined data rate to the AN.

5 35. The apparatus of any of claims 29 to 34, wherein the first
 threshold is calculated by accumulating a C/I corresponding to the data rate of
 the current data packet as many times as the maximum number of data packet
 transmissions.

10 36. The apparatus as claimed in either of claims 33 or 34, wherein the
 second threshold is calculated by dividing the required C/I corresponding to a
 current data rate by a predetermined margin and multiplying the number of
 already transmitted slots for the current data packet.

15 37. An apparatus for controlling transmission of a data packet from
 an access network (AN) in an access terminal (AT) of a mobile
 telecommunication system where the AN transmits the data packet in successive
 time slots each having a plurality of data bits and the AT receives the data packet
 from the AN, the apparatus comprising:

20 a device for comparing a received C/I of a forward pilot signal received
 from the AN with a predetermined first threshold; and

 a device for transmitting a signal requesting termination of
 retransmission of the data packet to the AN if the received power is greater than
 the first threshold.

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 38. The apparatus of claim 37, wherein the comparator detects the
 length of the data preamble of the received time slot, determines whether that is
 the low data rate and performs the comparison if the determined data rate is a low
 data rate, wherein the low data rate repeatedly transmits the same data packet two

times or more.

39. The apparatus of claim 37, further comprising:

a device for determining a data rate corresponding to the received power if the received power is equal to or less than the first threshold; and

5 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

40. The apparatus of claim 37, further comprising:

a device for comparing the received power with a predetermined second
10 threshold if the received power is equal to or less than the first threshold; and

a device for transmitting the signal requesting termination of retransmission of the data packet to the AN if the received power is less than the second threshold.

15 41. The apparatus of claim 40, further comprising:

a device for determining a data rate corresponding to the received power if the received power is equal to or greater than the second threshold; and

a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

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42. The apparatus of any of claims 37 to 41, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet transmissions.

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43. The apparatus as claimed in either of claims 40 or 41, wherein the second threshold is calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots for the current data packet.

44. An apparatus for controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive
5 time slots each having a plurality of data bits and the AT receives the data packet from the AN, the method comprising:

a device for comparing a received C/I of a forward pilot signal received from the AN with a predetermined threshold; and

a device for transmitting a signal requesting termination of
10 retransmission of the data packet to the AN if the received power is less than the threshold.

45. The apparatus of claim 44, wherein the comparator detects the length of the data preamble of the received time slot, determines whether that is
15 the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

46. The apparatus as claimed in either of claims 44 or 45, wherein the
20 threshold is calculated by multiplying a received C/I corresponding to a current data rate by the maximum number of data packet transmissions, subtracting a predetermined margin from the product, and multiplying the difference by a ratio of the number of already transmitted slots to the total number of slots transmittable for the data packet.

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47. An apparatus for controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet

from the AN, the apparatus comprising:

a device for comparing a received C/I of a forward pilot signal received from the AN with a predetermined first threshold;

a device for determining a data rate corresponding to the received power

5 if the received power is less than or equal to the first threshold; and

a device for requesting retransmission of the data packet to the AN by transmitting the determined data rate to the AN.

48. The apparatus of claim 47, wherein the comparator detects the
10 length of the data preamble of the received time slot, determines whether that is the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

15 49. The apparatus of claim 47, further comprising:

a device for comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold;

a device for determining the data rate corresponding to the received power if the received power is equal to or greater than the second threshold; and

20 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

50. The apparatus of any of claims 47 to 49, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of
25 the current data packet as many times as the maximum number of data packet transmissions.

51. The apparatus of claim 49, wherein the second threshold is calculated by dividing the required C/I corresponding to a current data rate by a

predetermined margin and multiplying the number of already transmitted slots for the current data packet.

52. An apparatus for controlling transmission of a data packet from
 5 an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet from the AN, the apparatus comprising:

a device for comparing a received C/I of a forward pilot signal received
 10 from the AN with a predetermined first threshold; and

a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN if the received power is equal to or less than the first threshold.

53. The apparatus of claim 52, wherein the comparator detects the
 15 length of the data preamble of the received time slot, determines whether that is the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

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54. The apparatus of claim 52, further comprising:

a device for comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold; and

a device for requesting retransmission of the data packet to the AN if the
 25 received power is equal to or greater than the second threshold.

55. The apparatus of any of claims 52 to 54, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet

transmissions.

56. The apparatus of claim 54, wherein the second threshold is calculated by dividing the required C/I corresponding to a current data rate by a
5 predetermined margin and multiplying the number of already transmitted slots for the current data packet.